(c) and (d) Seeing the water scarcity being faced by the State of Andhra Pradesh, Union Minister of Water Resources on 11th September 2003 impressed upon Chief Ministers□ of Karnataka to view favourably the request of Andhra Pradesh especially in the present critical situation and take immediate steps for release of water.

**Central Assistance for Modernisation of Tungabhadra Canals**

784. DR. ALLADI P. RAJKUMAR: Will the Minister of WATER RESOURCES be pleased to state:

(a) whether Government propose to assist in modernization of Tungabhadra canals for mutual benefit of Karnataka and Andhra Pradesh;

(b) if so, the details thereof; and

(c) the steps taken to resolve water sharing issues?

THE MINISTER OF STATE IN THE MINISTRY OF WATER RESOURCES (SHRIMATI BIJOYA CHAKRAVARTY): (a) and (b) No proposal for providing assistance for modernisation of Tungabhadra Canals has been received from the State Governments of Andhra Pradesh and Karnataka.

(c) The sharing of water stored in the Tungabhadra Dam between Andhra Pradesh and Karnataka is governed by the Krishna Water Disputes Tribunal Award (KWDT). The Tungabhadra Board is overseeing implementation of the KWDT Award.

**Long term solution to drought**

785. SHRI A. VIJAYARAGHAVAN : Will the Minister of WATER RESOURCES be pleased to state:

(a) whether Government are working on long term solution to drought;

(b) if so, the details of the 30 inter basin revierlinks including basins having surplus water to share, State-wise and category-wise;

(c) the details of 174 pilot recharge projects State-wise and category-wise;

(d) the steps taken for propagating rain water harvesting, State-wise, as on today, and

(e) the details of funds provided, if any, to Kerala State to abate water scarcity during summer season for the last three years, year-wise and category-wise?

THE MINISTER OF STATE IN THE MINISTRY OF WATER RESOURCES (SHRIMATI BIJOYA CHAKRAVARTY): (a) Yes, Sir.

(b) The erstwhile Ministry of Irrigation (now Ministry of Water Resources) and CWC formulated a National Prospective Plan (NPP) for Water Resources Development in 1980 envisaging interbasin transfer of water from Surplus basins to deficit basins/areas with a view to minimise the regional imbalances and optimally utilise the available water resources. NPP comprises of two components namely Himalayan Rivers Development component and peninsular Rivers Development Component. Based on water balance and pre-feasibility studies carried out by National Water Development Agency (NWDA), 30 links (14 under Himalayan Components and 16 under Peninsular component) have been identified for preparation of feasibility reports. A list of water transfer links is enclosed as Statement-I and II. (*See* below). According to basin-wise/ sub-basin-wise water balance studies carried out by NWDA, the following major basins/sub-basins are identified as having surplus water to share.

- Peninsular Component: Mahanadi, Godavari, Ken, Parbati, Kalisindh, Par and other West flowing rivers between Par and Tapi, Damanganga, Pamba, Achankovil, Netravati and Bedti.
- Himalayan Component: Kosi, Sarda, Ghagra, Gandak, Manas, Sankosh, Aie, Raidak, Torsa and Jaldhaka.

(c) Central Ground Water Board (CGWB) has implemented a Central sector scheme on study of recharge to ground water under which 174 pilot projects were sanctioned. The State-wise details are given in Statement-III (*See* below).

(d) Central Government have initiated following measures to propagate the techniques of rain water harvesting.

(i) Implementation of a Central Sector Scheme for study of Recharge to Groundwater in the country during Eighth and Ninth Five Year Plan.

(ii) Circulation of a Manual on Artificial Recharge of Ground water to the States/Union Territories to enable them to formulate area

specific Artificial Recharge Schemes to check the declining trend in ground water levels.

(iii) Organization of Mass Awareness programmes, publicity through TV talks, Radio programmes, Advertisements, Posters and Training Courses on Rain Water Harvesting and Artificial Recharge of ground water.

(iv) CGWA has launched a website on Roof Top Rainwater Harvesting (www/cgwaindia.com) to make aware and educate the public about various techniques of harvesting rainwater and store it for future use.

(e) Under Central Sector Schemes on 'Study of Recharge to Groundwater' 13 schemes of artificial recharge and rainwater harvesting have been taken up in the State of Kerala at the total cost of Rs. 88.18 lakhs. The year-wise break-up of amounts released during the last three years are as follows :

(Rs. in Lakhs)

| Year | Amount Released |
|---|---|
| 2000-2001 | 33.87 |
| 2001-2002 | 34.95 |
| 2002-2003 | 13.11 |
| 2003-2004 | Nil |

***Statement-I***

*List of Water Transfer Links for which feasibility reports are being prepared by NWDA under Himalayan Component*

| Sl. No. | Name of link | Beneficiary States |
|---|---|---|
| 1. | Kosi-Mechi link | Bihar |
| 2. | Koshi-Ghaghra link | Bihar and U.P. |
| 3. | Gandak-Ganga link | U.P. |
| 4. | Ghaghra-Yamuna link | U.P. |

| Sl. No. | Name of link | Beneficiary States |
|---|---|---|
| 5. | Sarda-Yamuna link | U.P. Uttaranchal |
| 6. | Yamuna-Rajasthan link | Haryana and Rajasthan |
| 7. | Rajasthan-Sabarmati link | Rajasthan and Gujarat |
| 8. | Chunar-Sone Barrage link | Bihar and U.P. |
| 9. | Sone Dam-Southern Tributaries of Ganga link | Bihar and Jharkhand |
| 10. | Brahmaputra-Ganga link (Manas-Sankosh-Tista-Ganga) | Assam, W.B. and Bihar |
| 11. | Jogighopa-Tista-Farakka link | Assam, W.B. and Bihar (Alt. to MSTG) |
| 12. | Farakka-Sunderbans link | W.B. |
| 13. | Ganga (Farakka)-Damodar-Sunernarekha link | W.B., Orissa and Jharkhand |
| 14. | Subernarekha-Mahanadi link | W.B. and Orissa |

***Statement-II***

*List of Water Tranfer Links for which feasibility reports are being prepared by NWDA under* peninsular component

| Sl. No. | Name | Beneficiary States |
|---|---|---|
| 1. | Mahanadi (Manibhadra)-Godavari (Dowlaiswaram) link | Andhra Pradesh and Orissa |
| 2. | Godavari (Polavaram)-Krishna (Vijayawada) link | Andhra Pradesh |
| 3. | Godavari (Inchampalli)-Krishna (Nagarjunasagar) link | Andhra Pradesh |
| 4. | Godavari (Inchampalli Low Dam)-Krishna (Nagarjunasagar Tail pond) link | Andhra Pradesh |

| Sl. No. | Name of link | Beneficiary States |
|---|---|---|
| 5. | Krishna (Nagarjunasagar)-Pennar (Somasila) link | Andhra Pradesh |
| 6. | Krishna (Srisailam)-Pennar (Prodattur) link | Andhra Pradesh and Karnataka |
| 7. | Krishna (Almatti)-Pennar link | Andhra Pradesh and Karnataka |
| 8. | Pennar (Somasila)-Cauvery (Grand Anicut) link | Andhra Pradesh, Tamil Nadu and Pondicherry |
| 9. | Cauvery (Kattalai)-Vaigai-Gundar link | Tamil Nadu |
| 10. | Parbati-Kalisindh-Chambal link | Madhya Pradesh and Rajasthan |
| 11. | Damanganga-Pinjal link | Maharashtra only water supply to Mumbai) |
| 12. | Par-Tapi-Narmada link | Gujarat |
| 13. | Ken-Betwa link | UP and MP |
| 14. | Pamba-Achankovil-Vaippar link | Tamil Nadu |
| 15. | Bedti-Varda link | Karnataka |
| 16. | Netravati-Hemavati link | Karnataka |

***Statement-III***

*State-wise details of artificial recharge projects under Central Sector Scheme "Recharge to Ground Water"*

| Sl. No. | State | No. of Schemes Sanctioned | Cost of schemes approved in Lakhs |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
| 1. | Andhra Pradesh | 10 | 54.55 |
| 2. | Arunachal Pradesh | 1 | 20.00 |
| 3. | Assam | 1 | 63.50 |
| 4. | Bihar | 2 | 10.52 |

| 1 | 2 | 3 | 4 |
|---|---|---|---|
| 5. | Chandigarh | 7 | 64.23 |
| 6. | Delhi | 18 | 96.07 |
| 7. | Gujarat | 3 | 20:05 |
| 8. | Haryana | 8 | 107.17 |
| 9. | Himachal Pradesh | 6 | 81.65 |
| 10. | Jammu and Kashmir | 8 | 78.96 |
| 11. | Jharkhand | 5 | 25.73 |
| 12. | Karnataka | 2 | 43.30 |
| 13. | Kerala | 13 | 88.18 |
| 14. | Madhya Pradesh | 5 | 53.85 |
| 15. | Maharashtra | 4 | 126.63 |
| 16. | Meghalaya | 1 | 20.32 |
| 17. | Mizoram | 1 | 28.00 |
| 18. | Nagaland | 3 | 116.43 |
| 19. | Orissa | 8 | 1508.29 |
| 20. | Punjab | 17 | 361.92 |
| 21. | Rajasthan | 18 | 122.80 |
| 22. | Tamil Nadu | 10 | 161.14 |
| 23. | Uttar Pradesh | 10 | 139.07 |
| 24. | Uttaranchal | 1 | 2.00 |
| 25. | West Bengal | 7 | 154.09 |
| 26. | Andaman and Nicobar Islands | 3 | 12.92 |
| 27. | Lakshadweep | 2 | 19.85 |
| | TOTAL : | 174 | 3581.22 |

**Topography maps for Interlinking River Projects**

786. DR. AKHILESH DAS : Will the Minister of WATER RESOURCES be pleased to state :

(a) whether the Chairman of the Task Force assigned with the feasibility of the River Linking Project had asked the Surveyor General of India for topography maps of the Indian rivers required for the study;